

```

PS C:\Users\ajpat> python3
Python 3.13.1 (tags/v3.13.1:0671451, Dec 3 2024, 19:06:28) [MSC v.1942
64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import numpy as np
>>> import matplotlib.pyplot as plt
>>> x = np.linspace(1,10,10)
>>> y = np.arange(1,10,1)
>>> print(x)
[ 1.  2.  3.  4.  5.  6.  7.  8.  9. 10.]
>>> print(y)
[1 2 3 4 5 6 7 8 9]
>>> y = np.arange(1,11,1)
>>> print(y)
[ 1  2  3  4  5  6  7  8  9 10]
>>> print('The first entries of x are',x[0],', ',x[1],', ',x[2])
The first entries of x are 1.0 , 2.0 , 3.0
>>>

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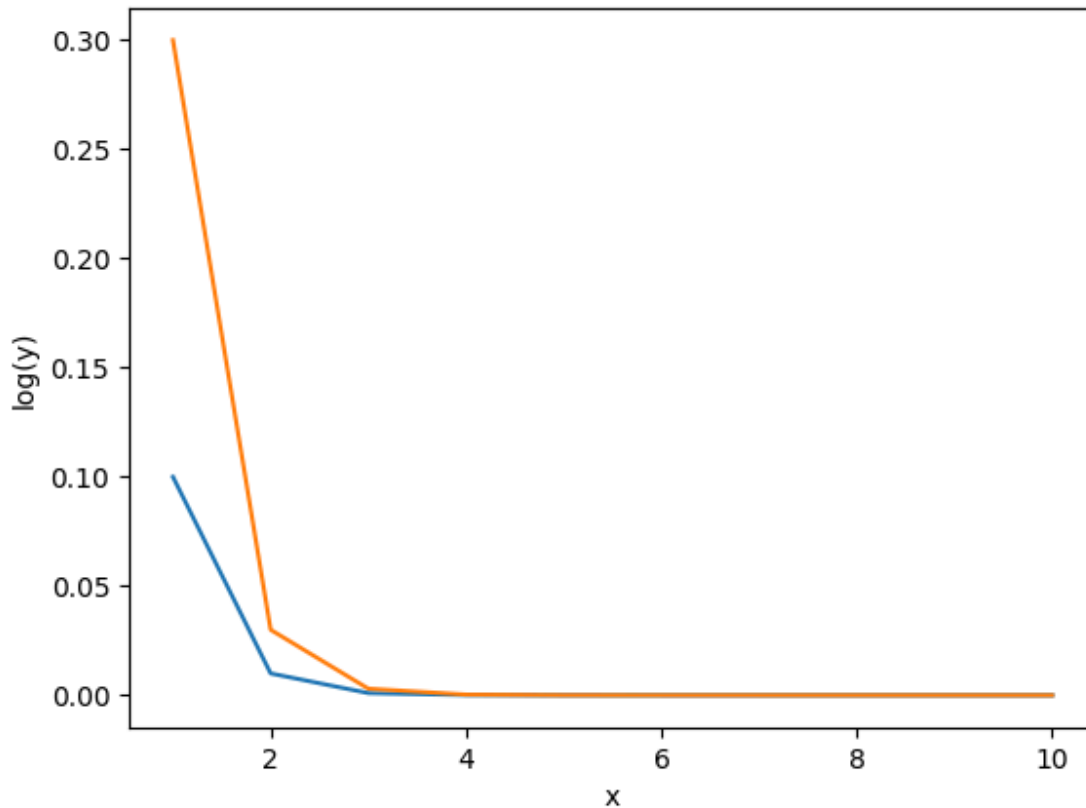
PS C:\Users\ajpat> python3
Python 3.13.1 (tags/v3.13.1:0671451, Dec 3 2024, 19:06:28) [MSC v.1942
64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import numpy as np
>>> import matplotlib.pyplot as plt
File "<python-input-1>", line 1
import matplotlib.pyplot as plt
^^^^^^^^^^
SyntaxError: invalid syntax
>>> import matplotlib.pyplot as plt
>>> w = 10*(-np.linspace(1,10,10))
>>> x = np.linspace(1,10,10)
>>> plt.plot(x,w)
[<matplotlib.lines.Line2D object at 0x000001E11A344690>]
>>> plt.xlabel('x')
Text(0.5, 0, 'x')
>>> plt.ylabl('log(y)')
Traceback (most recent call last):
  File "<python-input-7>", line 1, in <module>
    plt.ylabl('log(y)')
    ^^^^^^^^^
AttributeError: module 'matplotlib.pyplot' has no attribute 'ylabl'. Did
you mean: 'ylabel'?
>>> plt.semilogy
<function semilogy at 0x000001E1195FE020>
>>> plt.ylabel('log(y)')
Text(0, 0.5, 'log(y)')
>>> plt.show()

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>>> w = 10**(-np.linspace(1,10,10))
>>> x = np.linspace(1,10,10)
>>> plt.plot(x,w)
[<matplotlib.lines.Line2D object at 0x000001E11A344690>]
>>> plt.xlabel('x')
Text(0.5, 0, 'x')
>>> plt.ylabel('log(y)')
Traceback (most recent call last):
  File "<python-input-7>", line 1, in <module>
    plt.ylabel('log(y)')
    ^^^^^^^^^
AttributeError: module 'matplotlib.pyplot' has no attribute 'ylabel'. Did
you mean: 'ylabl'?
>>> plt.semilogy
<function semilogy at 0x000001E1195FE020>
>>> plt.ylabel('log(y)')
Text(0, 0.5, 'log(y)')
>>> plt.show()
>>>
>>> s = 3*w
>>> plt.hold()
Traceback (most recent call last):
  File "<python-input-13>", line 1, in <module>
    plt.hold()
    ^^^^^^^^^
AttributeError: module 'matplotlib.pyplot' has no attribute 'hold'
>>> plt.hold(True)
Traceback (most recent call last):
  File "<python-input-14>", line 1, in <module>
    plt.hold(True)
    ^^^^^^^^^
AttributeError: module 'matplotlib.pyplot' has no attribute 'hold'
>>> plt.plot(x,w)
[<matplotlib.lines.Line2D object at 0x000001E11A3E39D0>]
>>> plt.plot(x,s)
[<matplotlib.lines.Line2D object at 0x000001E11A3E3B10>]
>>> plt.ylabel('log(y)')
Text(0, 0.5, 'log(y)')
>>> plt.xlabel('x')
Text(0.5, 0, 'x')
>>> plt.semilogy
<function semilogy at 0x000001E1195FE020>
>>> plt.show()
>>> exit()
PS C:\Users\ajpat>

```



```

PS C:\Users\ajpat> cd "C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1\"
PS C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1> python3 testDot.py
File "C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1\t
estDot.py", line 18
    print('the dot product is : ', dp)
      ^
SyntaxError: invalid character ' ' (U+2019)
PS C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1> python3 testDot.py
File "C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1\t
estDot.py", line 5
    n = 100
    ^
IndentationError: expected an indented block after function definition o
n line 4
PS C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1> python3 testDot.py
the dot product is : 212660.24304678725
PS C:\Users\ajpat\OneDrive\Desktop\Junior_Year\APPM_4600\Lab\Lab1>

```

This is as far as I got in lab

